Indian Philosophy

1 The Paper

This paper deals with the thought of major writers in the classical Indian theory. Most lived in the period 100 A.D. to 1600 A.D. In recent years, philosophers have begun to reassess the sophistication and richness of the philosophical literature of ancient and classical India. The analytical techniques of modern philosophy are being used to interpret the texts in fresh and original ways. This paper explains the key methods, concepts and devices of Indian philosophical theory, situating them in a proper historical context. It will not be a mere survey of thinkers and doctrines, but will seek new interpretations designed to bring out the richness and contemporary interest of the Indian theory. We will ask: what is the nature of their philosophical project? what are the methods of philosophical inquiry used in pursuit of those goals? We shall concentrate on those philosophers who worked within and explored the parameters of a specific philosophical method, the so-called *pramāṇa* method, a way of analysing the basis and grounds of rational belief. We will study the work of the philosophers belonging to the traditional schools of Nyāya, Vaiśeṣika, Buddhism and Jainism, who used this method in their philosophical theory. And we will look at several independent sceptical philosophers who were highly critical of the conception of rational inquiry this method sustains. Knowledge of Sanskrit is not a requirement for this paper since all the texts we discuss are available in translation. Most of the secondary literature is available in the University and College libraries. SOAS library has all the books that are needed for this paper and students who are not at SOAS are allowed access to books and journals there.

2 General Reading

There are a number of excellent introductions to Indian philosophical theory. For more advanced treatment of the theory, the work of Bimal Matilal is highly recommended.

Bimal Krishna Matilal, *Epistemology, Logic and Grammar in Indian Philosophical Analysis* (Oxford, 2005) A recently re-printed classic.
Jonardon Ganeri, *Philosophy in Classical India: The Proper Work of Reason* (Routledge, 2001). A study of rationality and analysis in Indian philosophical theory.
J. N. Mohanty, *Classical Indian Philosophy* (Rowman and Littlefield, 2002). A short but wide-ranging and engaging book.

The volumes of Karl Potter's *Encyclopaedia of Indian Philosopiers* contain useful introductions and surveys of the primary literature. This is an ongoing project with different volumes being devoted to different philosophical schools. So far eight volumes have been published. Volume 1 is a comprehensive bibliography (it is available online at http://faculty.washington.edu/kpotter/).

Others.
Bimal Krishna Matilal, *Perception.* The best single volume in Indian epistemology, scholarly and reliable.
Bimal Krishna Matilal, *Collected Essays* (Oxford, 2002). Volume 1: *Mind, Language and World.* Volume 2: *Ethics and Epics.* A collection of fine essays on a great variety of philosophical and methodological topics.
Bimal Krishna Matilal, *Logic, Language and Reality* (Motilal Banarsidass, 1985). Difficult but definitive treatment of many important issues.
J.N. Mohanty, *Reason and Tradition in Indian Thought* (Oxford, 1998). Challenging interpretations of many key doctrines.
Stephen Phillips, *Classical Indian Metaphysics* (Open Court, 1995). Modern and engagingly written.
S.N. Dasgupta, *A History of Indian Philosophy* (Cambridge, 1922-55). An old and monumental classic, quite dated but still useful.

3 Texts

a. Nyāya

i. Early Nyāya

The principal interests of the philosophers of the Nyāya school are epistemology and philosophical method. These are the philosophers who most forcefully advocate the so-called *pramāṇa* method as a method for rational inquiry. The main philosophers and texts in early Nyāya are –

Gautama Akṣapāda c. AD 150. *Nyāyasūtra*
Vātsyāyana c. AD 450. *Nyāyabhāṣya* – commentary on *Nyāyasūtra*
Uddyotakara c. AD 600. *Nyāyavārttika* – commentary on *Nyāyabhāṣya*
Jayanta c. AD 875. *Nyāyamañjarī* – an independent work on Nyāya
Vācaspati c. AD 960. *Nyāyavārttikatātparyaṭīkā* – commentary on *Nyāyavārttika*
Udayana AD. 975–1050. *Ātmatattvaviveka*, *Lakṣaṇāvalī*, *Nyāyakusumāñjali*, and other treatises.

Nyāyasūtra, by Gautama Akṣapāda; Mrinalkanti Gangopadhyaya, *Gautama's Nyāyasūtra with Vātsyāyana's Commentary*, with an introduction by Debiprasad Chattopadhyaya (Calcutta: Indian Studies Past and Present, 1982).

Nyāyavārttika by Uddyotakara; Ganganatha Jha, *The Nyāyasūtras of Gautama with the Bhāṣya of Vātsyāyana and the Vārttika of Uddyotakara* (Delhi: Motilal Banarsidass, 1984), vols. 1–4.

Nyāyamañjarī by Jayanta.; J. V. Bhattacharyya, *Nyāyamañjarī: The Compendium of Indian Speculative Logic* (Delhi: Motilal Banarsidass, 1978).

Ātmatattvaviveka, by Udayana; Kisor Kumar Chakrabarti, *Classical Indian Philosophy of Mind: The Nyāya Dualist Tradition* (Albany: State University of New York Press, 1999), pp.219–276. —, N. S. Dravid, *Ātmatattvaviveka of Udayanācārya* (Shimla: Indian Institute of Advanced Study, 1995).

Lakṣaṇāvalī, by Udayana; Musashi Tachikawa, *The Structure of the World in Udayana's Realism: A Study of the Lakṣaṇāvalī and the Kiraṇāvalī* (Dordrecht: Reidel Publishing Company, 1981).

Nyāyakusumāñjali, by Udayana; N. S. Dravid, *Nyāyakusumāñjali of Udayanācārya* (Delhi: Indian Council of Philosophical Research, 1996).

ii. Navya-Nyāya

Navya-Nyāya, the 'new' Nyāya is a philosophical system invented by Gaṅgeśa Upādhyāya c. AD 1325. It tries to find solutions to many of the criticisms that the early Nyāya conception of rational inquiry were confronted with by the sceptics. Raghunātha Śiromaṇi c. AD 1500 revolutionised the teachings and methods of the school. Both he and his great follower, Gadādhara Bhaṭṭācārya c. AD 1650, wrote short independent tracts on particular philosophical problems and concepts.

Tattvacintāmaṇi, by Gaṅgeśa; Chapter I (epistemology) – Stephen Phillips and N. S. R. Tatacharya, *Gaṅgeśa's 'Jewel of Reflection on the Truth (about Epistemology),' the Perception Chapter* (Columbia University Press, 2005). Chapter II (logic) – Cornelius Goekoop, *The Logic of Invariable Concomitance in the Tattvacintāmaṇi* (Dordrecht: Reidel Publishing Co., 1967), pp. 55–154. Daniel H. H. Ingalls, *Materials for the Study of Navya-Nyāya Logic* (Harvard: Harvard University Press, 1951). B. K. Matilal, *The Navya-Nyāya Doctrine of Negation* (Harvard: Harvard University Press, 1968). There is a very thorough précis of the whole book in Karl Potter and Sibajiban Bhattacharyya eds. *Indian Philosophical Analysis – Nyāya-Vaiśeṣika from Gaṅgeśa to Raghunātha Śiromaṇi* Encyclopedia of Indian Philosophies, vol. 6 (Delhi: Motilal Banarsidass, 1993), pp. 85–311.

Padārthatattvanirūpaṇa, by Raghunātha; Karl H. Potter, *The Padārthatattvanirūpaṇam of Raghunātha Śiromaṇi* (Cambridge, Mass.: Harvard University Press, Harvard Yenching Institute Studies, vol. 17, 1957).

Viṣayatāvāda, by Gadādhara; Sibajiban Bhattacharyya, *Gadādhara's Theory of Objectivity* (Delhi: Indian Council of Philosophical Research, 1990), vol. 2.

b. Vaiśeṣika

Vaiśeṣika is an ancient school of metaphysics, known especially for its theory of categories and attempts to offer philosophical explanations for a variety of natural phenomena. Its generally naturalistic outlook complemented the heuristic methods of the Nyāya school, and with Udayana the two schools virtually merged into one. Important philosophers and texts in Vaiśeṣika include –

Kaṇāda c. AD 100. *Vaiśeṣikasūtra.*
Praśastapāda c. 575. *Padārthadarmasaṃgraha.*
Śrīdhara c. 990. *Nyāyakandalī.*
Śaṅkara Miśra c. 1425. *Upaskāra.*

Vaiśeṣikasūtra, by Kaṇāda; Nandalal Sinha, *The Vaiśeṣikasūtras of Kaṇāda, with the Upaskāra commentary of Śaṅkara Miśra* (Allahabad: The Panini Office, Bhuvaneswari Asrama, 1911).

Padārthadarmasaṃgraha, by Praśastapāda; Ganganatha Jha, *Padārthadharmasaṃgraha with Śrīdhara's Nyāyakandalī*, *The Pandit,* n.s. vols. 25–37 (1903–15). Reprinted as a single volume.

c. The Buddhists

i. Nāgārjuna and the Madhyamaka School

Nāgārjuna's c. AD 150 interpretation of the teachings of the Buddha was called the Doctrine of the Middle Way. He argues that all philosophical and scientific theories are empty of content. He is a severe critic of the *pramāṇa* method for conducting rational inquiry, and he claims instead that the only way to reason is by exposing incoherences within the fabric of one's conceptions. Candrakīrti c. AD 600 is an influential exponent and interpreter of Nāgārjuna.

Mūlamadhyamakakārikā (The Middle Stanzas), by Nāgārjuna; Jay L. Garfield, *The Fundamental Wisdom of the Middle Way* (New York: Oxford University Press, 1995). —, David Kalupahana, *Nāgārjuna: The Philosophy of the Middle Way* (Albany: SUNY Press 1986). —, Kenneth Inada, *Nāgārjuna: A Translation of his Mūlamadhyamakakārikā* (Tokyo: Hokuseido Press, 1970). —, Frederick Streng, *Emptiness: A Study in Religious Meaning* (Nashville: Abingdon Press, 1967), pp. 183–220.

Vigrahavyāvartanī (Reply to Critics), by Nāgārjuna; K. Bhattacharya, E. H. Johnston and A. Kunst in *The Dialectical Method of Nāgārjuna: Vigrahavyāvartanī* (Delhi: Motilal Banarsidass, 1986).

Prasannapadā, by Candrakīrti; Mervyn Sprung, *Lucid Exposition of the Middle Way: The Essential Chapters from the Prasannapadā of Candrakīrti* (Boulder, Colorado: Prajña Press, 1979).

ii. Diṅnāga and Yogācāra Buddhism

Diṅnāga c. AD 500 and his great follower Dharmakīrti c. AD 625 interpreted the teachings of the Buddha in a very different direction, as a kind of idealism. The members of this school were brilliant logicians and made many important advances in philosophical theory. Although they are idealists, they are also advocates of the *pramāṇa* method as the correct way of investigating and resolving philosophical problems. They disagree with the Nyāya about almost every matter of philosophical substance, but because they share a common approach

to the rational resolution of philosophical dilemmas, the encounter between the two schools is fascinating and is an important axis in the evolution of Indian philosophical thought.

Pramāṇasamuccaya (*Collection on Knowing*), by Diṅnāga; Chapter I (perception). Masaaki Hattori, *Dignāga, On Perception, being the Pratyakṣapariccheda of Dignāga's Pramāṇasamuccaya from the Sanskrit fragments and the Tibetan versions* (Cambridge, Mass.: Harvard University Press, 1968), pp. 21–70. Chapter II, V (logic, language). Richard P. Hayes, *Dignāga on the Interpretation of Signs* (Dordrecht: Kluwer Academic Publishers, 1988), pp. 231–248, 252–299.

Ālambanaparīkṣā (*Examination of Supports*), by Diṅnāga; Fernando Tola And Carmen Dragonetti, "Dignāga's Ālambanaparīkṣāvṛtti," *Journal of Indian Philosophy* 10 (1982), pp. 105–134. –, N. Aiyaswami Shastri, *Ālambanaparīkṣā and vṛtti by Diṅnāga with the Commentary of Dharmapāla, restored into Sanskrit from the Tibetan and Chinese Versions and Edited with an English Translation and Notes* (Madras: The Adyar Library, 1942).

Hetucakraḍamaru (*Chart of Reasons*), by Diṅnāga; Durgacharan Chatterji, "*Hetucakranirṇaya* - A Translation", *Indian Historical Quarterly* 9 (1933), pp. 266–272, 511–514. —, Richard S. Y. Chi, *Buddhist Formal Logic: A Study of Dignāga's Hetucakra and K'uei-chi's Great Commentary on the Nyāyapraveśa* (London: Royal Asiatic Society, 1969).

Pramāṇavārttika (*Commentary on Knowing*), by Dharmakīrti; Chapter I ('inference for oneself'). [v. 1–10] Richard P. Hayes and Brendan S. Gillon, "Introduction to Dharmakīrti's Theory of Inference as Presented in Pramāṇavārttika Svopajñavṛtti 1–10," *Journal of Indian Philosophy* 19 (1991), pp. 1–74. Chapter II ('establishment of knowing'). [verses 1–6] Shoryu Katsura, "Dharmakīrti's Theory of Truth," *Journal of Indian Philosophy* 12 (1984), pp. 215–235. [34–72] Eli Franco, *Dharmakīrti on Compassion and Rebirth* (Vienna: Arbeitskreis für Tibetische und Buddhistische Studien Universität Wien, 1997). Chapter III ('perception'). [1–51] Satkari Mookerjee and Hojun Nagasaki, *The Pramāṇavārttika of Dharmakīrti – An English Translation of the First Chapter with the Autocommentary* (Nalanda: Nava-Nalanda Mahavira Research Publication, 1964). Chapter IV ('inference for others'). [1–148] Tom J. F. Tillemans, *Dharmakīrtis Pramāṇavārttika – An Annotated Translation of the Fourth Chapter (parārthānumāna) Vol. 1* (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 2000).

Nyāyabindu, by Dharmakīrti; Mrinalkanti Gangopadhyaya, *Vinītadeva's Nyāyabinduṭīkā* (Calcutta: Indian Studies Past & Present, 1971). —, Theodore Stcherbatsky, "A Short Treatise of Logic by Dharmakīrti with its Commentary by Dharmottara," in his *Buddhist Logic,* vol. 2 (New York: Dover Publications, 1962), pp. 1–253. —, G. C. Pande, *Nyāyabindu* (Sarnath, 1996).

Vādanyāya, by Dharmakīrti; Pradeep P. Gokhale, *Vādanyāya of Dharmakīrti: The Logic of Debate* (Delhi: Sri Satguru Publications, 1993).

d. Others

i. The Jainas

Important Jaina philosophers include Siddhasena Divākara c. AD 700, Haribhadra Sūri c. AD 750, Hemacandra c. AD 1150 and Malliṣena c. AD 1290. Their belief in the principles of tolerance, harmony and rapprochement lead them to a philosophy of pluralism in metaphysics and ethics and to perspectivalism in epistemology and semantics.

Nyāyāvatāra, by Siddhasena Divākara; Piotr Balcerowicz, *Jaina Epistemology in Historical and Comparative Perspective* (Franz Steiner Verlag, 2000). –, Satis Chandra Vidyabhusana, *Nyāyāvatāra: The Earliest Jaina Work on Pure Logic* (Arrah: Central Jain Publishing House, 1915); reprinted in A. N. Upadhye ed., *Siddhasena's Nyāyāvatāra and Other Works* (Bombay: Jain Sahitya Vikasa Mandala, 1971). —,

Satkari Mookerjee, "A Critical and Comparative Study of Jaina Logic and Epistemology on the Basis of the *Nyāyāvatāra* of Siddhasena Divākara", *Vaishali Institute Research Bulletin* 1 (1971), pp. 1–144.

Pramāṇamīmāṃsā, by Hemacandra; Satkari Mookerjee and N. Tatia, *Hemacandra's Pramāṇamīmāṃsā, Text and Translation with Critical Notes* (Varanasi: Tara Publications, 1970).

Syādvādamañjarī, by Malliṣeṇa; partial translation by S. K. Saksena and C. A. Moore, in S. Radhakrishnan and C. A. Moore eds. *A Sourcebook in Indian Philosophy* (Princeton: Princeton University Press, 1957), pp. 260–268.

ii. The Sceptics

Two important sceptical thinkers are Jayarāśi c. AD 750, and Śrīharṣa c. AD 1150. They are critics of the epistemological and metaphysical theories of the Nyāya, Vaiśeṣika, Buddhist and Jaina philosophers, and their criticisms were often the spur for philosophical progress in those systems.

Tattvopaplasiṃha, by Jayarāśi; Chapter 1 (Perception). Eli Franco, *Perception, Knowledge and Disbelief: A Study of Jayarāśi's Scepticism* (2nd Edition, Delhi: Motilal Banarsidass, 1994). Chapter 2 (Inference). S.N. Shastri and S. N. Saksena, in Sarvepalli Radhakrishnan and Charles Moore eds, *A Sourcebook in Indian Philosophy* (Princeton: Princeton University Press, 1957), pp. 236–246.

Khaṇḍanakhaṇḍakhādya, by Śrīharṣa; Ganganath Jha, *The Khaṇḍanakhaṇḍakhādya of Śrī Harṣa* (Delhi: Sri Satguru, 1986), 2 vols. —, (Book I, Introduction). Phyllis Granoff, *Philosophy and Argument in Late Vedānta: Śrīharṣa's Khaṇḍanakhaṇḍakhādya* (Dordrecht: Reidel Publishing Company, 1978), pp. 71–208. —, (Book I, Inference). Gangopadhyay, Mrinalkanti, *Indian Logic In Its Sources* (Delhi: Munshiram Manoharlal, 1984), pp. 67–118.

4 Topics

a. Early Nyāya — Methods of Rationality Inquiry (the *pramāṇa* method)

i. Rationality and philosophical method in India

Wilhelm Halbfass, "Darśana, Ānvīkṣikī, Philosophy," in his *India and Europe: an Essay in Understanding* (Albany: State University of New York Press, 1988), pp. 263–286.

Bimal Krishna Matilal, "On The Concept of Philosophy in India," in *Philosophy, Culture and Religion: Collected Essays* (Delhi: Oxford University Press, 2001).

Bimal Krishna Matilal, *Perception: An Essay on Classical Indian Theories of Knowledge* (Oxford: Clarendon Press, 1986), chapter 3.

ii. The senses, the mind and the soul.

Kishor Chakrabarti, *Indian Philosophy of Mind: The Nyāya Dualist Tradition* (Albany: State University of New York Press, 1999).

Bimal Krishna Matilal, *Perception: An Essay on Classical Indian Theories of Knowledge* (Clarendon Press, Oxford, 1986), chapters 6, 8.

Bimal Krishna Matilal, "A Realist View Of Perception," in P. K. Sen and R. R. Verma eds., *The Philosophy of P.F. Strawson* (New Delhi: Indian Council Of Philosophical Research, 1995), pp. 305–326; reprinted in his *Philosophy, Religion, Culture: Collected Essays* (Delhi: Oxford University Press, 2001).

Arindam Chakrabarti, "I Touch What I Saw," *Philosophy and Phenomenological Research* 52 (1992), pp. 103–117.

Jonardon Ganeri, "Cross-modality and the self," *Philosophy and Phenomenological Research* (2001).

iii. Extrapolation, informal logic, theory of debate

Bimal Krishna Matilal, *The Character of Logic in India* (Albany: State University of New York Press, 1998).

Esther Solomon, *Indian Dialectics* (Ahmedabad: B. J. Institute of Learning and Research, 1976), 2 volumes.

Mrinalkanti Gangopadhyay, *Indian Logic In Its Sources* (Delhi: Munshiram Manoharlal, 1984).

Claus Oetke, "Ancient Indian Logic as a Theory of Non-Monotonic Reasoning," *Journal of Indian Philosophy* 24 (1996), pp. 447–539.

John Taber, "Is Indian Logic Non-Monotonic?," *Philosophy East and West* 54 (2004), pp. 143-170.

Jonardon Ganeri ed., *Indian Logic: A Reader* (London: Cuzon, 2001).

Jonardon Ganeri, Survey chapter on Indian Logic in *Handbook of the History of Logic*, Volume 1: Greek, Indian and Arabic Logic, edited by D.M. Gabbay and J. Woods, 2004, pp. 255–332.

Pradeep Gokhale, *Inference and Fallacies Discussed in Ancient Indian Logic* (Delhi: Sri Satguru, 1992).

iv. Testimony and tradition.

Bimal Krishna Matilal and Arindam Chakrabarti eds., *Knowing from Words* (Dordrecht: Kluwer, 1994).

J. N. Mohanty, *Reason and Tradition in Indian Thought* (Oxford: Clarendon Press, 1992), chapters 8, 9.

Jonardon Ganeri, "Testimony," in *Semantic Powers: Meaning and the Means of Knowing in Classical Indian Philosophy* (Oxford: Clarendon Press, 1999), pp. 72–81.

b. Madhyamaka Buddhism — Emptiness, Scepticism and Objectivity

i. Emptiness

David Seyfort Ruegg, *The Literature of the Madhyamaka School of Philosophy in India* (Wiesbaden: Otto Harrassowitz, 1981).

C. W. Huntington, *The Emptiness of Emptiness: An Introduction to Early Indian Madhyamaka* (Honolulu: University of Hawaii Press, 1989).

David Burton, *Emptiness Appraised: A Critical Study of Nāgārjuna's Philosophy* (London: Curzon Press, 1999).

ii. The four options, Nāgārjuna's dialectical method.

Robinson, Richard H., "Some Logical Aspects of Nāgārjuna's System", *Philosophy East and West* 6 (1957), pp. 291–308.

David Seyfort Ruegg, "The Uses of The Four Positions of The Catuṣkoṭi and The Problem of The Description of Reality in Mahāyāna Buddhism," *Journal of Indian Philosophy* 5 (1977), pp. 1–71.

Brian Galloway, "Some Logical Issues in Madhyamaka Thought", *Journal of Indian Philosophy* 17 (1989), pp. 1–35.

Frank Hoffman, "Rationality in Early Buddhist Four-Fold Logic," *Journal of Indian Philosophy* 10 (1982), pp. 309–337.

Vijay Bharadwaja, "Rationality, Argumentation and Philosophical Embarrassment: A Study of Four Logical Alternatives (*catuṣkoṭi*) in Buddhist Logic," *Philosophy East & West*

34 (1984), pp. 303–319; reprinted in his *Form and Validity in Indian Logic* (Shimla: Indian Institute for Advanced Study, 1990), chapter 4.

iii. Paradoxes of causation, proof and motion

Bimal Krishna Matilal, *Perception* (Oxford: Clarendon Press, 1986), chapter 2.

Mark Siderits, "Nāgārjuna as Anti-Realist," *Journal of Indian Philosophy* 16 (1988), pp. 311–325.

Kamaleswar Bhattacharya, "Nāgārjuna's Arguments against Motion: Their Grammatical Basis," in G. Bhattacharya et al. eds., *A Corpus of Indian Studies: Essays in Honour of Professor Gaurinath Sastri* (Calcutta: Sanskrit Pustak Bhandar, 1980), pp. 85–95.

Kamaleswar Bhattacharya, "The Grammatical Basis of Nāgārjuna's Arguments: Some Further Considerations," *Indologica Taurinensia*, 8–9 (1980–1), pp. 35–43.

George Cardona, "A Path Still Taken: Some Early Indian Arguments Concerning Time," *Journal of the American Oriental Society* 111.3 (1991), pp. 445–464.

iv. The threat of self-refutation

Richard Robinson, "Did Nāgārjuna Really Refute All Philosophical Views?", *Philosophy East and West* 22 (1972), pp. 325–331.

David Seyfort Ruegg, "Does the Mādhyamika have a Thesis and Philosophical Position," in B. K. Matilal and R. D. G. Evans eds., *Buddhist Logic and Epistemology: Studies in The Buddhist Analysis of Inference and Language* (Dordrecht: Reidel Publishing Company, 1982), pp. 229–238.

Paul Sagal, "Nāgārjuna's Paradox," *American Philosophical Quarterly* 29.1 (1992), pp. 79–85.

v. The theory of no-self

Jonardon Ganeri, "An irrealist theory of self," *The Harvard Review of Philosophy* XII (Spring 2004), pp. 61–80.

Mark Siderits, *Personal Identity and Buddhist Philosophy* (Ashgate, 2004).

Roy Perrett, "Personal Identity, Minimalism and Madhyamaka," *Philosophy East and West* 52 (2002), pp. 373-385.

Matthew Kapstein, *Reason's Traces* (Wisdom Books, 2001).

c. Vaiśeṣika Metaphysics – Order in Nature

i. The categories

Wilhelm Halbfass, *On Being and What There Is: Classical Vaiśeṣika and the History of Indian Ontology* (Albany: State University of New York Press, 1992), chapters 1–5.

Karl Potter ed., *Indian Metaphysics and Epistemology – The Tradition of Nyāya-Vaiśeṣika up to Gaṅgeśa*, the Encyclopedia of Indian Philosophies, vol. 2 (Delhi: Motilal Banarsidass, 1977), introduction.

S. Bhaduri, *Studies in Nyāya-Vaiśeṣika Metaphysics* (Poona: Bhandarkar Oriental Research Institute, 1947).

ii. Universals, cross-cutting systems of natural kinds.

Bimal Matilal, *Perception* (Oxford: Clarendon Press, 1986), chapters 11, 12.

Kishor Chakrabarti, "The Nyāya-Vaiśeṣika Theory of Universals", *Journal of Indian Philosophy* 3 (1975), pp. 363–382.

Wilhelm Halbfass, *On Being and What There Is: Classical Vaiśeṣika and the History of Indian Ontology* (Albany: State University of New York Press, 1992), chapters 6, 7.

Sibajiban Bhattacharyya, "The Navya-Nyāya Theory of Universals," in his *Gadādhara's Theory of Objectivity*, Part 1: General Introduction to Navya-Nyāya Concepts (New Delhi: Indian Council of Philosophical Research, 1990), chapter 3.

iii. Absence as a type of entity.

Daniel Ingalls, *Materials for the Study of Navya-Nyāya Logic* (Cambridge, Mass.: Harvard University Press, 1951), pp. 54–62, 69–72.

Bimal Matilal, *The Navya-Nyāya Doctrine of Negation* (Harvard: Harvard University Press, 1968).

Bimal Matilal, "Double Negation in Navya-Nyāya", in M. Nagatomi et al. eds., *Sanskrit and Indian Studies: Essays in Honour of Daniel H. H. Ingalls* (Dordrecht: Kluwer, 1980), pp. 1–10; reprinted in *Logic, Language and Reality* (Delhi: Motilal Banarsidass, 1985), pp. 145–154.

Prabal Kumar Sen, "The Nyāya-Vaiśeṣika Theory of Variegated Colour (*citrarūpa*): Some Vexed Problems, *Epistemology, Logic And Ontology After Matilal* (Shimla: Indian Institute of Advanced Studies), *Studies in Humanities and Social Sciences* 3.2 (1996), pp. 151–172.

iv. Number

Jonardon Ganeri, "Objectivity and Proof in the Indian Theory of Number," *Synthese* 129.3 (2001), pp. 413–437.

Jonardon Ganeri, "Numbers as Properties of Objects: Frege and the Nyāya", *Epistemology, Logic And Ontology After Matilal* (Shimla: Indian Institute of Advanced Studies), *Studies In Humanities And Social Sciences* 3.2 (1996), pp. 111–121.

Roy W. Perrett, "A Note on the Navya-Nyāya Account of Number," *Journal of Indian Philosophy* 13 (1985), pp. 227–234.

B. K. Matilal, "On the theory of number and paryāpti in Navya-Nyāya," in his *Mind, Language and World* (Oxford University Press, 2002), pp. 133-140.

d. Yogācāra Buddhism – Reduction and Rational Reconstruction

i. Metaphysics and epistemology in Diṅnāga and Dharmakīrti

Masaaki Hattori, *Dignāga, On Perception, being the Pratyakṣapariccheda of Dignāga's Pramāṇasamuccaya from the Sanskrit fragments and the Tibetan versions* (Cambridge, Mass.: Harvard University Press, 1968).

Richard Hayes, *Dignāga on the Interpretation of Signs* (Dordrecht: Kluwer Academic Publishers, 1988).

B. K. Matilal & J. G. D. Evans eds., *Buddhist Logic and Epistemology: Studies in the Buddhist Analysis of Inference and Language* (Dordrecht: Reidel Publishing Company, 1982).

Bimal Matilal, *Perception* (Oxford: Clarendon Press, 1986), chapters 7, 10.

George Dreyfuss, *Recognizing Reality* (Albany: SUNY, 1997).

John Dunne, *Foundations of Dharmakīrti's Philosophy* (Wisdom Books, 2004).

ii. Language, meaning, exclusion

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